Remarks

Claims 1-3, 8-16, 30, 51, 52, and 57-65 are pending in the subject application. Applicants gratefully acknowledge the Examiner's withdrawal of the finality of the rejections in the Office Action dated December 16, 2003. By this Amendment, Applicants have amended claims 2, 3, and 57-59. Support for the amendments can be found throughout the subject specification and in the claims as originally filed. Entry and consideration of the amendments presented herein is respectfully requested. Accordingly, claims 1-3, 8-16, 30, 51, 52, and 57-65 are currently before the Examiner. Favorable consideration of the pending claims is respectfully requested.

As an initial matter, Applicants gratefully acknowledge the Examiner's withdrawal of the rejections under 35 U.S.C. § 112, first paragraph, 35 U.S.C. § 102(b), and 35 U.S.C. § 112, second paragraph. Applicants also request the electronic records of the Patent Office be updated to reflect the new title presented in the last response. A review of the Patent Office electronic records indicates the new title is not yet reflected therein.

Claims 1-3, 8-16, 30, 51, 52, and 57-65 are rejected under 35 U.S.C. § 112, second paragraph, as indefinite. By way of this Amendment, claim 59 has been amended to recite "610391" instead of "310391" (support for which can be found in the subject specification in Table 1 at page 153 and which corrects an inadvertent typographical error). Additionally, Applicants respectfully submit that the cited range of nucleotides (from base 610110 through, and including, base 610391) provides a total of 282 nucleotides (corresponding to a total of 94 amino acids). In addition, claim 59 has also been amended to delete subsection (c), thereby rendering the rejection moot. Accordingly, reconsideration and withdrawal of the rejection under 35 U.S.C. § 112, second paragraph, is respectfully requested.

Claims 1-3, 9, 10, 13, 14, and 57-61 are rejected under 35 U.S.C. § 102(e)(2) as anticipated by Black *et al.* (U.S. Patent No. 6,207,647). The Office Action asserts that the Black *et al.* patent discloses SEQ ID NO: 1 which is a nucleotide sequence of a polynucleotide of the subject invention. By this Amendment, independent claims 2, 3, and 57-59 have been amended to delete SEQ ID NO: 1140 thereby rendering the rejection of these claims, and those dependent therefrom, moot. However, Applicants respectfully traverse the rejection of claim 1, and those claims dependent therefrom, over the teachings of Black *et al.*



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It is respectfully submitted that Black *et al.* fail to teach a polynucleotide that encodes a polypeptide comprising SEQ ID NO: 1140. For example, the sequence of SEQ ID NO: 1 is not in the proper reading frame to encode a polypeptide comprising SEQ ID NO: 1140 nor is it in the proper coding orientation in view of the teachings of the reference. As indicated at column 12, lines 52, the polynucleotide of SEQ ID NO: 1 is the open reading frame of a protein having the number of amino acids set forth in SEQ ID NO: 2 (490 amino acids). The reference fails to teach any other polypeptide encoded by the disclosed sequence. Accordingly, it is respectfully submitted that the reference fails to teach a polynucleotide encoding the polypeptide of SEQ ID NO: 1140 and reconsideration and withdrawal of the rejection under 35 U.S.C. § 102(e)(2) is respectfully requested.

Claims 2, 3, 9, 10, 13, and 14 are rejected under 35 U.S.C. § 102(b) as anticipated by Cousineau *et al.* (1992). The Office Action further asserts that the Cousineau *et al.* reference discloses a *Chlamydia trachomatis* gene sequence which matches the polynucleotide of the subject invention. By this Amendment, the claims have been amended to delete reference to SEQ ID NO: 1089 in claims 2 and 3, thereby rendering the rejection of these claims moot. Accordingly, reconsideration and withdrawal of the rejection under 35 U.S.C. § 102(b) is respectfully requested.

Applicants note that the Office Action indicates that Cousineau *et al.* teach a sequence that "matches" the polynucleotide cited in claim 59, part b. However, it is respectfully submitted that the reference does not "match" or anticipate claim 59, part b as the sequence provided in the alignment has a gap at nucleotides 286-288 of the query sequence. As is clear from the alignment, the sequence of Cousineau *et al.* has three additional nucleotides as compared to the claimed span of nucleotides of claim 59, part b. Accordingly, it is respectfully submitted that the sequence is not anticipated by Cousineau *et al.*

Claims 2, 3, and 30 are rejected under 35 U.S.C. § 103(a) as obvious over Southern (WO 89/10977, 1989). The Office Action indicates that the Southern publication describes the preparation and use of arrays of polynucleotides. Thus, the claimed polynucleotides and DNA chip would have been obvious to an ordinarily skilled artisan in view of the teachings of the cited publication. Applicants respectfully traverse.

To establish a *prima facie* case of obviousness, the prior art reference (or references when combined) must teach or suggest all the claim limitations and the teaching or suggestion to make the



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claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991); *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. 580 (CCPA 1974).

Applicants respectfully submit that the rejection over Southern fails to establish a *prima facie* case of obviousness as it fails to set forth any teachings that address the limitations related to the polynucleotides that would make up the array as set forth in claim 30. Additionally, the reference does not appear to teach any *C. trachomatis* polynucleotide sequences and no such teachings are discussed in the rejection of record. Accordingly, since the rejection of record fails to teach each and every limitation of the claimed invention, it is respectfully submitted that a *prima facie* case of obviousness has not been established and reconsideration and withdrawal of the rejection under 35 USC §103(a) is respectfully requested.

It should be understood that the amendments presented herein have been made solely to expedite prosecution of the subject application to completion and should not be construed as an indication of Applicants' agreement with or acquiescence in the Examiner's position. Applicants expressly reserve the right to pursue the invention(s) disclosed in the subject application, including any subject matter canceled or not pursued during prosecution of the subject application, in a related application.

In view of the foregoing remarks and amendments to the claims, Applicants believe that the currently pending claims are in condition for allowance, and such action is respectfully requested.

The Commissioner is hereby authorized to charge any fees under 37 CFR §§1.16 or 1.17 as required by this paper to Deposit Account No. 19-0065.



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Applicants invite the Examiner to call the undersigned if clarification is needed on any of this response, or if the Examiner believes a telephonic interview would expedite the prosecution of the subject application to completion.

Respectfully submitted,

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